Mid-Level/Journeyman Level

Coursework Area(s)	Competency	Aligned Skill
(1) Basic Project Management I (2) Earned Value Management and Cost Estimating I (3) Basic Acquisition I (4) Leadership and Interpersonal Skills I (5) Government Specific I	**Requirements/Management Development Process:** Knowledge of government-wide and agency-specific investment management requirements, acquisition policies, and program management strategies that support assigned missions and functions through understanding how to manage risk; understanding of the many factors that influence cost, schedule, and performance; attention to lessons learned; understanding of metrics needed to manage programs and projects that deliver quality, affordable, supportable, and effective systems/products.	**Requirements Development Process:** Knowledge of the Agency process that is the precursor to the acquisition process and is aimed at identifying, assessing and prioritizing needed mission oriented capability gaps, and is performed in coordination with potential users. Ability to participate in, under supervision, a study of different non-system specific, or activity specific, material and non-material approaches (concepts) to provide a required capability, assessing in an operational context the performance characteristics of alternatives.
		Concept Selection Process: Ability to define the process and participate in, under instruction, an analysis of the alternative, and application of OMB A-94 to reduce the number of and refine the concept(s) to better meet the mission capability gap. Knowledge of the Agency process for selection of material/non-material course of action relative to satisfying the capability gap. Ability to establish performance measures and associated metrics to evaluate a possible solution. Ability to define a process that the Agency will use to select a preferred system concept (if the preferred concepts includes a material solution) that may be continued into Technology Development. Knowledge of the key features of a Technology Development Strategy that flows from the completed analysis of alternatives, studies to date, draft plans and selected material concepts.
		Technology Development Process: Ability to expand, if applicable, together with the user, "customer needs" into system requirements: Performance parameters, objectives and thresholds (the difference being Trade Space), Affordability constraints, Scheduling constraints, Technical constraints, Environmental issues, Joint, combined, and inter-agency interoperability Knowledge of a limited number of key performance parameters that are critical to the development of an effective capability. Knowledge of a process to derive, if applicable, an acquisition project baseline from the user's performance and schedule requirements, and best estimates of total project cost consistent with projected funding. Ability to plan technology developments and demonstrations (in coordination with systems engineering and test and evaluation personnel/organizations) needed for the capability under consideration. Knowledge of the Agency policy on interoperability. Knowledge of the issues in performing requirements trade-offs. Knowledge of the role of an Acquisition Strategy. Knowledge of the benefits of project coordination with users, milestone decision authority, industry and other projects (e.g., same, other agencies, and
		Core Management Skills & Processes: Knowledge of the process for the development of the project and defining project scope, environmental, safety, and occupational health (ESOH), and security measures. Ability to participate, under instruction, in the preparation of a plan for Total Life Cycle System Management (Integrated Master Plan) that addresses phased inputs, outputs, deliverables for each phase, and internal and external project technical reviews, Congressional processes, audits, and how various project functions will be performed and managed. Ability to participate, under instruction, in the preparation of an integrated master schedule, employing schedule network tools and techniques, work loading methods, and using Agency project management software to produce a schedule in one or more desired formats. Inputs to this process may include: Activity duration estimating; Work Breakdown Schedule; Project baseline; Resource calendars; Resource requirements; Activities parameters; Project integrated master plan; Ability to prepare, under instruction, a project and contract WBS structuring/ tailoring each WBS to the project and applying elements of scheduling, risk
		Total Ownership Cost (OMB A-94): Recognize the role and nature of an estimate of Total Ownership Cost (TOC) prepared in Vendor format, and the need to revisit and ensure it is consistent with prior OMB A-94 and PART analysis as appropriate, considering full project scope in applying cost estimating techniques/tools to cases involving management decisions, e.g., contractor versus government logistics support: Recognize estimating techniques/tools for developing rough cost estimating (Engineering Estimating, Parametric, etc.) Recognize cost estimating techniques/tools to estimate: 1) ECP and modification costs; 2) project cost; and 3) Life Cycle Cost/TOC for the project. Recognize an associated risk level for all cost estimating. Recognize impact of various reduced funding profiles. Recognize costs within each applicable appropriation. Recognize the need for assumptions, and why they should be valid. Recognize cost policies and practices. Participate, under instruction, in the preparation of a business case analysis applying cost benefit trade-offs to the project. Recognize the need for appropriate indices for then year and constant year estimating. Knowledge of the reasons for application of Department/Agency financial policies
		Risk & Opportunity Management: Knowledge of the risk/opportunity management process which includes planning, assessment (identification and analysis), handling and monitoring, all to be integrated and continuously applied throughout the project. Knowledge of the value of decision analysis in the selection of risk handling options/ opportunities and the need to fold those options into a detailed Integrated Master Plan and Integrated Master Schedule (IMP/IMS). Recognize the need to identify and prioritize risk events to be handled. Recognize the need for mitigation strategies based on risk assessments. Recognize the need to evaluate mitigation strategy performance. Has knowledge of application of critical chain management tools and techniques to balance risks with available resources. Knowledge of the value of an organizational structure/method to track and manage risk/opportunities. Knowledge of a process to use the project WBS to develop a risk management organization for the project including contractor representatives. Knowledge of how a risk/opportunity management project is to be used with the

		Market Research (including socio-economic considerations): Ability to perform, under instruction, using FAR Part 10 and 12 (if applicable), a business strategy for market research, the application of dual-use technologies to market research, and use of commercial items within market research (using socioeconomic considerations throughout)
		Communications Management: Ability to share and communicate lessons learned. Ability to use correct and effective oral and written skills. Knowledge of the importance of the dissemination of information both internally and externally. Ability to demonstrate effective briefing skills
		Working Groups and Teams: Knowledge of the functions of membership in a working group or project oriented team, including Integrated Product and Process Teams. Demonstrate knowledge of team development functions and the need to be: Open in discussions, Qualified to participate and an empowered team member, Consistent, success-oriented, proactive in participation, Continuous communications (including "up-the-line" communications), Reasoned in disagreement, Active in offering issues and committed to their early resolution.
(1) Basic Project Management I (2) Earned Value Management and Cost Estimating I (3) Government Specific I	**Systems Engineering:** The recognition of scientific, management, engineering and technical skills used in the performance of system planning, research and development, with an emphasis on performing and managing a technical process.	
		Technical Management Process: Knowledge of the nature of the decision analysis methods that will provide the basis for evaluating and selecting alternatives for decision making. Decision Analysis involves selecting the criteria for the decision and the methods to be used in conducting the analysis. Ability to develop a plan for Technical Assessment that measures technical progress and the effectiveness of plans and requirements. Activities within Technical Assessment include those associated with Technical Performance Measurement and the conduct of technical reviews. Knowledge of systems life cycle management concepts used to plan, develop, implement, operate and maintain information systems. Ability to participate in, under instruction, the execution of a Risk/Opportunity Management plan and methods applicable to a systems engineering context that examines the risks of deviating from the project plan. It will examine all aspects of the project and their relationships. The plan and methods should integrate design (performance) requirements with other life cycle issues such as manufacturing, operations, environment, safety, and occupational health considerations, and support. Knowledge of Configuration Management methods and best practices to establish and maintain consistency of a product's attributes with its requirements and product configuration information. Ability to identify the key processes employed in interface management, including the ability to trace system requirements through the software allocation architecture and use of an interface matrix. Ability to describe the content of a plan for Technical Data Management.
		Technical Process: Knowledge of the nature of the requirements development process for working with the user to establish and refine operational needs, attributes, performance parameters, trade-offs and constraints that flow from the needed capabilities, and then ensure that all relevant requirements are addressed. Ability to develop a process to monitor/ coordinate/participate in the validation procedures that answers the question of "Did you build the right thing?" Ability to establish a process of obtaining sets of logical solutions to improve knowledge of the defined requirements and the relationships among the requirements. Ability to define a process for monitoring and selecting Design Solution that translates the outputs of the Requirements Development and Logical Analysis processes into alternative design solutions and selects a final design solution. Knowledge of the value of a process for monitoring the integration procedures for incorporating the lower level system elements into a higher level system element in the physical and logical architecture. The plan or strategy for the integration process, including the assembly sequence, may impose constraints on the design solution. Knowledge of processes for monitoring the integration procedures for incorporating the lower level system elements into a higher level system element in the physical and logical architecture. The plan or strategy for the Integration process, including the assembly sequence, may impose constraints on the design solution.
(1) Basic Project Management I (2) Government Specific I	**Test & Evaluation (T&E):** Knowledge of efficient and cost effective methods for planning, monitoring, conducting and evaluating tests of prototype, new or modified systems equipment or material, including the need to develop a thorough T&E strategy to validate system performance through measurable methods that relate directly to requirements and to develop metrics that demonstrate system success or failure	
		Integration of T&E: Ability to determine the need for a comprehensive T&E project including Modeling and Simulation.
		Test and Evaluation Strategy (TES): Knowledge of the value of a comprehensive Test & Evaluation Strategy (TES) and how this document can evolve into the Test & Evaluation Master Plan (TEMP)
		Realistic or Operational Test and Evaluation (OT&E): Knowledge of the Agency OT&E process.
(1) Basic Project Management I (2) Earned Value Management and Cost Estimating I (3) Government Specific I	**Life Cycle Logistics (LCL) :** Knowledge of performance-based logistic efforts that optimize total system life cycle availability, supportability and reliability/maintainability while minimizing cost, the logistic footprint and interoperability	
		Life-cycle Logistic (LCL) Management, Product Support, and Interoperability: Ability to implement alternative logistics support practices, including supply chain functions, best public sector and commercial practices, and technology solutions. Ability to determine the need for a modular open systems approach (MOSA) where interoperability is a key LCL facilitator.
(1) Basic Acquisition I (2) Government Specific I	**Contracting :** Knowledge of the supervision, leadership and management processes/procedures involving the acquisition of supplies and services, construction, research and development; acquisition planning to include performance-based considerations; cost and price analysis; solicitation and selection of sources; preparation, negotiation and award of contracts; all phases of contract administration; termination options and processes for closeout of contracts; and legislation, policies, regulations and methods used in contracting, and business and industry practices.	
		Contract Approach: Knowledge of a process by which the efforts of the PM and PCO, and all other personnel responsible for an acquisition, are integrated through a comprehensive plan for fulfilling the Agency need in a timely manner and at a reasonable cost
		Prepare Requirements & Support Documentation: Ability to participate in pre-award actions required by FAR Subpart 7.1 Acquisition Planning, and the remainder of FAR Parts 1-12 etc., considering key and complex contract terms and conditions for the solicitation
		Prepare & Issue Solicitation: Knowledge of the process for formulating pre-award policies, FAR (if applicable) Parts 5 Publicizing Contract Actions, 13 Simplified Acquisition Procedures and 14, Sealed Bidding, etc. Ability to develop a comprehensive project specification and statement of work that fully and correctly defines the project, addressing roles and missions of the government and contractor

		Perform Source Selection: Knowledge of the process for formulating a source selection plan that allows for best value selection from a competitive solicitation. Knowledge of the process for structuring a formal source selection process that is commensurate to the level of procurement action to include the Source Selection Evaluation Board, Source Selection Advisory Counsel/Committee, and Source Selection Authority.
		Administer Contract: Knowledge of how to support contract administrative actions.
		Performance-based Service Agreements: Knowledge of how to negotiate for the required level of support at a cost consistent with available support funding. Ability to establish a negotiated baseline of performance with operational users, and the corresponding commercial and/or organic support providers.
(1) Earned Value Management and Cost Estimating I (2) Government Specific I	**Business, Cost Estimating & Financial Management :** Knowledge of the forms of cost estimating, cost analysis, reconciliation of cost estimating, financial planning, formulating financial projects and budgets, budget analysis/execution, benefit-cost analysis, Earned Value Management (EVM), and other methods of performance measurement.	
		Business Financial Planning & Management: Ability to oversee application of Total Life Cycle Systems Management (TLCSM), or a similar concept, which requires the PM to base major decisions on system-wide analyses and the life cycle consequences of those decisions, and on system performance and affordability.
		Cost Estimating: Knowledge of cost estimating processes, methods, techniques, analytical principles, data, confidence bands, specialized costing, application of OMB A-94, and management applications.
		Financial Reporting & Oversight: Provides guidance on preparing the FY Budget submission and includes instructions on budget execution.
		Earned Value Management (EVM): Knowledge of earned value management (EVM) policies, methodologies, and software for performance measurement of projects. Knowledge of the Integrated Baseline Review (IBR) process. Knowledge of techniques used to determine effective project strategies when EVM indicators are yellow and/or red or cross a threshold.
		Dept/Agency Programming, Planning and Budgeting Type System (OMB A-11): Knowledge of how to allocate funds within appropriation categories and how to use the funds from each appropriation. Knowledge of the Department/Agency's policy/instructions for financial planning, programming, budget development, and budget execution, OMB A-11 application, including the documentation processes, which are employed in the development and decision making of a Department/Agency's total federal fiscal activity for a given fiscal period.
(1) Leadership and Interpersonal Skills I (2) Government Specific I	**Leadership/Professional :** Ability to lead/manage a project team to satisfactory achievement of project goals.	
		Partnering: Develops networks and builds alliances; collaborates across boundaries to build strategic relationships and achieve common goals.
		Conflict Management: Manages and resolves conflicts, grievances, confrontations and/or disagreements in a constructive manner to minimize negative personal impact.
		Team Building/IPT: Inspires and fosters team commitment, spirit, pride, and trust. Facilitates cooperation and motivates team members to accomplish group goals.
		Political Savy: Identifies the internal and external politics that impact the work of the organization. Perceives organizational and political reality and acts accordingly.
		Strategic Thinking: Formulates objectives and priorities, and implements plans consistent with the long-term interests of the organization in a global environment. Capitalizes on opportunities and manages risks.
		Decisiveness: Makes well-informed, effective, and timely decisions, even when data are limited or solutions produce unpleasant consequences; perceives the impact and implications of decisions.
		Creativity/Innovation: Develops new insights into situations; questions conventional approaches; encourages new ideas and innovations; designs and implements new or cutting edge programs/processes.
		External Awareness: Understands and keeps up-to-date on local, national, and international policies and trends that affect the organization and shape stakeholders' views; is aware of the organization's impact on the external environment.
		Developing Others: Develops the ability of others to perform and contribute to the organization by providing ongoing feedback and by providing opportunities to learn through formal and informal methods.
		Entrepreneurship: Positions the organization for future success by identifying new opportunities; builds the organization by developing or improving products or services. Takes calculated risks to accomplish organizational objectives.